

USE OF INSECT CELL MEMBRANE TRANSPORTERS AS NOVEL TARGET SITES FOR INSECTICIDES

ABSTRACT OF THE DISCLOSURE

5 The present invention discloses the existence of novel insect transporters that
can be used as targets for screening of new insecticides. This invention provides nucleic
acids which encode the following insect cell membrane transporters: acetylcholine
transporters, serotonin transporters, proline transporters, glutamate transporters,
neurotransmitter transporters encoded by the inebriated gene, orphan transporters, GABA
10 transporters, and LAT transporters. The invention also provides the polypeptides, cells
expressing the polypeptides, and methods of using the nucleic acids and polypeptides to
identify compounds which bind to or modulate the activity of the above-listed insect cell
membrane transporters.

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